I-Chao Shen

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Room 501, CSIE Building, National Taiwan University

Research Interests

Data-driven 2D/3D geometry analysis and processing, (Stereo) Image/Video Editing.

Education

• National Taiwan University Taipei, Taiwan Ph.D. student in Computer Science Sep 2017 -Advisor: Bing-Yu Chen.

• National Taiwan University

Taipei, Taiwan Sep 2009 - June 2011 Master in Information Management and MBA

Advisor: Bing-Yu Chen.

Thesis: "Perspective-aware Warping for Seamless Stereoscopic Image Cloning".

• National Taiwan University Bachelor in Information Management

Taipei, Taiwan Sep 2005 - June 2009

Experiences

• Research visitor - JST CREST Project, Tokyo, Japan Feb 2018 - July 2018

Supervisor: Takeo Igarashi

• Research Assistant - Imager Lab, The University of British Columbia,

Sep 2014 - Jan 2017 Vancouver, Canada

Supervisor: Alla Sheffer

May 2015 - Aug 2015 • Research Intern - Imagination Lab, Adobe Research, San Jose, CA

Supervisor: Nathan Carr, Duygu Ceylan, Zhaowen Wang

Sep 2011 - July 2014 • Research Assistant - CITI, Academia Sinica, Taipei, Taiwan

Supervisor: Wen-Huang Cheng

Publications

• ZomeFab: Cost-effective Hybrid Fabrication with Zometools

I-Chao Shen, Ming-Shiuan Chen, Chun-Kai Huang, and Bing-Yu Chen Computer Graphics Forum, 2019

• Perception-Driven Semi-Structured Boundary Vectorization

Shayan Hoshyari, Edoardo Dominici, Alla Sheffer, Nathan Carr, Duygu Ceylan, Zhaowen Wang, I-Chao Shen ACM Transactions on Graphics (Proceedings of SIGGRAPH 2018).

• High-resolution 360 Video Foveated Stitching for Real-time VR

Wei-Tse Lee*, Hsin-I Chen*, Ming-Shiuan Chen, I-Chao Shen and Bing-Yu Chen Computer Graphics Forum (Proceedings of Pacific Graphics 2017)

• A Scalable Active Framework for Region Annotation in 3D Shape Collections

Li Yi, Vladimir G. Kim, Duygu Ceylan, I-Chao Shen, Mengyan Yan, Hao Su, Cewu Lu, Qixing Huang, Alla Sheffer, and Leonidas Guibas

ACM Transactions on Graphics (Proceedings of SIGGRAPH Asia 2016)

Retargeting 3D Objects and Scenes with a General Framework

Chun-Kai Huang, Yi-Ling Chen, I-Chao Shen, and Bing-Yu Chen Computer Graphics Forum (Proceedings of Pacific Graphics 2016)

• Data-driven Handwriting Synthesis in a Conjoined Manner

Hsin-Yi Chen, Tse-Ju Lin, I-Chao Shen, and Bing-Yu Chen Computer Graphics Forum (Proceedings of Pacific Graphics 2015)

• Gestalt Rule Feature Points

I-Chao Shen, and Wen-Huang Cheng

IEEE Transactions on Multimedia (TMM), 17(4), pp. 526-537, 2015

• Geometrically Consistent Stereoscopic Image Editing using Patch-based Synthesis

Sheng-Jie Luo, Ying-Tse Sun, I-Chao Shen, Bing-Yu Chen, and Yung-Yu Chuang IEEE Transactions on Visualization and Computer Graphics (TVCG), 21(1), pp. 56-67, 2015

• Stroke-guided Image Synthesis for Skeletal Structure Editing

Sheng-Jie Luo, Chin-Yu Lin, I-Chao Shen, and Bing-Yu Chen

Computer Graphics Forum (Proceedings of Pacific Graphics 2013)

• Perspective-Aware Warping for Seamless Stereoscopic Image Cloning

Sheng-Jie Luo, I-Chao Shen, Bing-Yu Chen, Wen-Huang Cheng, and Yung-Yu Chuang ACM Transactions on Graphics (Proceedings of SIGGRAPH Asia 2012).

Technical Reports and Preprints

• Interactive Subspace Exploration on Generative Image Modelling

Toby Chong Long Hin, I-Chao Shen, Issei Sato, and Takeo Igarashi arXiv:1906.09840 [cs.GR], June 2019

Short Papers, Posters

• Large-scale fabrication with interior zometool structure

Ming-Shiuan Chen, I-Chao Shen, Chun-Kai Huang, and Bing-Yu Chen ACM SIGGRAPH Poster Program 2018

• A Deep Learning Based Method For 3D Human Pose Estimation From 2D Fisheye Images

Ching-Chun Chen, Chia-Min Wu, I-Chao Shen, and Bing-Yu Chen.

ACM IUI Poster Program 2018

• Retargeting 3D objects and scenes

Chun-Kai Huang, Yi-Ling Chen, I-Chao Shen, and Bing-Yu Chen ACM SIGGRAPH Poster Program 2015

• Painting Photolization

Chien-Wen Jung, I-Chao Shen, Sheng-Jie Luo, Bing-Yu Chen, and Wen-Huang Cheng ACM SIGGRAPH ASIA Poster Program 2013

• Texturing and Deforming Meshes with Casual Images

I-Chao Shen, Yi-Hua Wang, Yu-Mei Chen, Bing-Yu Chen, and Wen-Huang Cheng ACM SIGGRAPH ASIA Poster Program 2012

• User-Assisted Disparity Maps

Hsin-Yi Chen, Yi-Shan Lin, I-Chao Shen, Sheng-Jie Luo, Wen-Huang Cheng and Bing-Yu Chen Pacific Graphics 2012 short paper

• MusicSpace: You "Play" The Music

Chun-Yu Tsai, Hung-Jung Lin, Tzu-Hao Kuo, Kai-Yin Cheng, I-Chao Shen, Bing-Yu Chen, and Rung-Huei Liang

ACM SIGGRAPH Poster Program 2010

Patent

• Smoothing images using machine learning

Nathan A Carr, Zhaowen Wang, Duygu Ceylan, I-Chao Shen United States Patent, No. 9799102, issued October 24, 2017.

Teaching Experiences

• Teaching Assistant

- Computer Organization and Structure National Taiwan University

Sep 2009 - Jan 2010

Awards and Honors

• MediaTek Fellowship 2017

Professional Services

 \bullet Reviewer: SIGGRAPH, Pacific Graphics, CAD/Graphics, Multimedia, VRST